1980

Annual Report
Insect and Disease Conditions in W. Va.
To
The United States Forest Service, Delaware, Ohio

Alsophila pometaria

Fall cankerworm - Populations continue at low levels in Grant and Jefferson Counties. However surveys indicate that populations are building in Grant County. Approximately 100 acres were defoliated near Dolly Sods this spring.

Oak leaf tier - The tier complex continues to plauqe the red oaks in Pocahontas and Greenbrier Counties. The infestations this year were extremely low and little damage was noted.

Eastern tent caterpillar - Malacosoma americana - Populations were very high this year. Probably one of the worst this Author has seen. The insect was not everywhere, but where it did occur damage was complete. One area in Kanawha County had 200 - 300 acres of scattered oak defoliated by the eastern tent caterpillar. My guess is they had to feed on something and this was suitable. This makes the first time I have ever seen defoliation to non host species by the caterpillar.

Forest tent caterpillar - Malacosoma disstria - Populations were at very low numbers this year. Few specimens were collected or noted.

Scarlet oak sawfly - Caliroa quercuscoccineae - Populations have subsided in W. Va. and no visible damage was noted.

Fall webworm - Hyphantria cunea - The insect is common throughout the state but in no instance is there evidence of an outbreak. Nests in many parts of the state are just starting to form. (Sept. 10, 1980)

Locust leaf miner - Xenochalepus dorsalis - The damage by locust leaf miner was severe this year. Damage was noted in areas previously void of this insect. (First year for severe damage in Pendleton, Jefferson, Morgan, Berkeley, Mineral, Grant, Hampshire, Hardy, and Pocahontas Counties.)

Areas not infested are the high mountain areas of Randolph, Tucker, Pocahontas, Nicholas, Webster, and Greenbrier Counties.

Walking sticks - Populations of this insect were very low this year and little damage was noted.

Sycamore lacebug - This insect is extremely heavy and caused sycamore throughout the state to turn a bronze color in Mid and late August. This is the first year this insect has caused noticeable damage to sycamores throughout the state.

Larger elm leaf beetle - The beetle caused conplete defoliation to elms throughout the state by late August. This insect has never been a problem in past years but this year seems to be a banner year.

Spiny elm caterpillar - This insect has been found in conjunction with the larger elm leaf beetle and causing light damage.

Tip moths - Nantucket and pine tip moths - Populations of this insect seem to be on the increase in W. Va. this year. Numerous Christmas tree plantations were noted to have an abundance of this insect.

Gypsy moth - There were 348 male moths caught in 172 traps this year in West Virginia. Of this total, 218 moths were caught in Berkeley County, 58 moths in Jefferson, 53 moths in Morgan, 6 moths in Hampshire, 11 moths in Mineral and 2 moths in Pocahontas.

The two male moths in Pocahontas are county records for W. Va.

All moth catches in eastern panhandle are concentrated towards the Maryland border line.

An infestation was found at Mountain Mission in Jefferson County on June 11, 1980. From this area 27 larvae were collected, 3 pupae, and two egg masses (hatched 1980).

All larvae and moth catches are north and West of the shannondale Development area which was treated in 1979 for the control of the moth.

The trapping for Male moths was on a 2 kilometer and 3 kilometer grid.

Egg mass surveys will be conducted this fall in areas where male moth catches were more abundant.

This year has been one where we have experienced very little insect problems or any major problems.

We did experience an early snow fall on October 9, 1979 and caused heavy damage to timber in Webster and Summers County. Generally, the trees affected the hardest were open grown, cut over areas and border line trees. Also those trees with multiple tops or forked branches were affected.

A serious problem with Scotch pine at North Bend State Park has been diagnosed as poor planting. The trees are 17 years old and are dying. Upon inspection the roots have and are girdling the trees causing death.

Annual Report of Disease Incidence in 1980

Dutch Elm Disease - *Ceratocystis ulmi*

Dutch elm disease has become a serious forest and shade tree problem in West Virginia. We have observed diseased trees throughout the state. Disease incidence appears to be most prevalent along the states major river drainages. We disseminate information to the public concerning this disease through News Releases, Radio and Television interviews and by making pamphlets available.

Oak Wilt - *Ceratocystis fagacearum*

From aerial surveillance it appears as though disease incidence fluctuates from year to year. On the average though 3000 trees a year are spotted that have oak wilt. The WVDA Oak Wilt program was discontinued in 1977. however, since that time aerial surveillance has been maintained over certain counties to moniter disease incidence.

Sycamore Anthracnose - *Gnomonia platani*

Sycamore anthracnose incidence was quite low during 1980. After two years of severe disease incidence, many sycamore trees couldn't survive another year of heavy defoliation. Climatic conditions this spring were not conducive to infection and disease development.

Hardwood Anthracnose - other than on sycamore

Anthracnose disease has been observed causing limited premature defoliation on maple and hickory trees. No problems are anticipated as the defoliation occured in the late summer and early fall.

Bullseye Leaf Spot - Cristulariella pyramidalis

Bullseye leaf spot incidence was moderate to heavy this year on maples and other deciduous trees and shrubs. Some premature defoliation was noted.

Actinopelte Leaf Spot - Actinopelte dryina

This disease has been observed on several pin oaks in Kanawha County. Although the disease is quite conspicuous, no problems from premature defoliation are anticipated because defoliation didn't begin until late summer.

Lophodermium Needlecast - Lophodermium pinastri

Lophodermium needlecast was reported in one Scotch pine Christmas tree plantation. Individual trees in the stand suffered very light damage. Lophodermium needlecast hasn't caused any serious problems in the state for several years.

Diplodia Tip Blight - (Diplodia pini)

Diplodia tip blight was noted on red and Austrain pines planted as ornamentals throughout the state. Extensive damage was noted on individual trees but not in large stands.

Cytospora Canker - (Cytospora kunzei)

This disease has been observed on Norway spruce trees throughout the state. Some trees have suffered extensive die-back as a result of infection. Usually, only a few trees at any location are diseased.

Atropellis Canker - (Atropellis tingens)

Atropellis canker continues to be a problem in several Scotch pine Christmas tree plantations in the state. Diseased trees exhibit typical flagging symptoms. Close examination reveals cankers on the flagged branches with apothecia present in the canker area. No main stem cankers were noted.

Annosus Root Rot - Heterobasidium annosum (formerly Fomes annosus)

Annosum root rot is known to occur in several conifer stands in the state. To date losses has been light in these stands.

Pin Oak Blight - (Endothia gyrosa)

The pin oak blight fungus was recently found in the Kanawha Valley. The causal fungus, Endothia gyrosa, was observed at three different locations on pin oaks and at one location on American beech. At no location was the disease severe. It was mainly found causing small branch cankers or cankers on exposed roots.

Pinewood Nematode - (Bursaphelenchus lignicolos)

After sampling, literally hundreds of dying pines, we finally isolated the pinewood nematode in June from dying Scotch pine in Kanawha County. Dr. Friedman USDA-PHIS at Beltsville confirmed the find. In August pinewood nematode was isolated from a stand of dying Scotch pine in Hampshire County.

White Pine Root Decline - (Verticicladiella procera)

The white pine root decline survey is being continued to ascertain the impact of this disease in white pine plantations. A cooperative study with WVU researchers is also being conducted to answer some of the basic questions about the disease. Our attention has centered around developing a selective media for isolating the causal organism from the soil.

White Pine Blister Rust - (Cronartium ribicola)

The West Virginia Department of Agriculture still maintains a white pine blister rust control program. Approximately 8000 ribes plants were destroyed on 4,275 acres of land. In addition to direct control activities, 23,000 acres were surveyed in

detection, pre-suppression and post control surveys.

A total of 12,530 acres of the control area was placed in a "no further work" category due to Ribes and pine conditions. This brings the total acreage of state and private land in West Virginia that will need no further work to 350.963 acres of a total of 414,813.

Air Pollution

Air pollution symptoms were not nearly as evident this year as they have been in past years. Last year white pines displayed extensive tip burn damage from ozone and other oxidents. The damage was most severe in the Southern and eastern sections of the state. This year little tip burn was noted.